# CARL SHAPIRO

# Curriculum Vitae

Haas School of Business
University of California
Berkeley, CA 94549
(510) 642-5905
(510) 643-1420 (Fax)
shapiro@haas.berkeley.edu
Home Page: http://haas.berkeley.edu/~shapiro/

#### **Professional Positions**

TRANSAMERICA PROFESSOR OF BUSINESS STRATEGY Walter A. Haas School of Business University of California at Berkeley, 1994 - present.

PROFESSOR OF BUSINESS AND ECONOMICS
Walter A. Haas School of Business and Department of Economics
University of California at Berkeley, 1990 - present.

DEPUTY ASSISTANT ATTORNEY GENERAL FOR ECONOMICS Antitrust Division, U.S. Department of Justice U.S. Department of Justice, 1995 - 1996

CHAIRMAN, ECONOMIC ANALYSIS AND POLICY GROUP Walter A. Haas School of Business
University of California at Berkeley, 1991 - 1993.

PROFESSOR OF ECONOMICS AND PUBLIC AFFAIRS Woodrow Wilson School of Public and International Affairs and Department of Economics, Princeton University, 1987 - 1990.

#### RESEARCH FELLOW

Center for Advanced Study in the Behavioral Sciences Stanford University, 1989 - 1990.

VISITING SCHOLAR
Stanford Law School, Stanford University, 1989 - 1990.

ASSISTANT PROFESSOR OF ECONOMICS AND PUBLIC AFFAIRS Woodrow Wilson School of Public and International Affairs and Department of Economics, Princeton University, 1980 - 1987.

# VISITING FELLOW

Institute for International Economic Studies, University of Stockholm, 1986.

VISITING ASSISTANT PROFESSOR OF ECONOMICS AND PUBLIC POLICY Graduate School of Business, Stanford University, 1982 - 1983.

ECONOMIST, BUREAU OF ECONOMICS, FEDERAL TRADE COMMISSION Summer 1980.

# Other Professional Activities

Vice-Chair, Economics Committee, Antitrust Section, American Bar Association, 1995 - present.

Editor, Journal of Economic Perspectives, 1993 - 1995.

President, Industrial Organization Society, 1995 - 1996.

Member, Defense Science Board Task Force on Antitrust Aspects of Defense Industry Consolidation, U.S. Department of Defense, 1993 - 1994.

Co-Editor, Journal of Economic Perspectives, 1986 - 1993.

Associate Editor, Quarterly Journal of Economics, 1984 - 1987.

Associate Editor Rand Journal of Economics, 1984 - 1986.

Research Associate, National Bureau of Economic Research, 1985 - present.

Director, John M. Olin Program for the Study of Economic Organization and Public Policy, Princeton University, 1988 - 1989

Associate Director, John M. Olin Program for the Study of Economic Organization and Public Policy, Princeton University, 1987 - 1988.

# Affiliations

American Economic Association
American Bar Association

## Education

Ph.D. Economics, M.I.T., 1981.

M.A. Mathematics, University of California at Berkeley, 1977.

B.S. Economics, M.I.T., 1976.

B.S. Mathematics, M.I.T., 1976.

# Honors, Fellowships, and Research Grants

National Science Foundation Research Grant #SES-9209509, "Technology Transitions with Network Externalities," 1992-1994, (with Joseph Farrell).

National Science Foundation Research Grant #SES-8821529, "The Evolution of Network Industries," 1989-1991, (with Joseph Farrell).

Center for Advanced Study in the Behavioral Sciences, Stanford California, Research Fellowship, 1989-1990.

National Science Foundation Research Grant #SES-8606336, "Issues of Industrial Organization in International Trade," 1986-1988, (with Gene M. Grossman).

Alfred P. Sloan Foundation Research Fellowship, 1985-1987.

National Science Foundation Research Grant #SES-8408622, "Technological Competition and International Trade," 1984-1986, (with Gene M. Grossman).

National Science Foundation Research Grant #SES-8207337, "Signals of Product Quality," 1982-1984.

National Science Foundation Graduate Fellowship, 1977-1980.

University of California Fellowship, 1976-1977.

Phi Beta Kappa and Sigma Xi, M.I.T., 1976.

## **Publications**

- "Antitrust Policy: Towards a Post-Chicago Synthesis," Jobs & Capital, Winter 1997.
- "An Economic Analysis of Unilateral Refusals to License Intellectual Property," with Richard J. Gilbert, Proceedings of the National Academy of Sciences, November 12, 1996.
- "Re-Examining Dominance and Unlawful Exclusion Rules," Antitrust Conference Report, The Conference Board, 1996.
- "Antitrust in Network Industries," Antitrust Division, U.S. Department of Justice, March 1996 (http://gopher.usdoj.gov/atr/speeches/shapir.mar).
- "Mergers with Differentiated Products," Antitrust, Spring 1996.
- "Aftermarkets and Consumer Welfare: Making Sense of Kodak," Antitrust Law Journal, Spring 1995.
- "Systems Competition and Network Effects," with Michael L. Katz, Journal of Economic Perspectives, Spring 1994.
- "Systems Competition and Aftermarkets: An Economic Analysis of Kodak," with David J. Teece, Antitrust Bulletin, Spring 1994.
- "The Dynamics of Bandwagons," with Joseph Farrell, in Problems of Coordination in Economic Activity, James W. Friedman, ed., Kluwer Press, 1993.
- "Standard Setting in High Definition Television," with Joseph Farrell, Brookings Papers on Economic Activity: Microeconomics, 1992.
- "Product Introduction with Network Externalities," with Michael L. Katz, Journal of Industrial Economics, March 1992.

- "Horizontal Mergers: Reply," with Joseph Farrell, American Economic Review, September 1991.
- "Introduction to Liability Symposium," Journal of Economic Perspectives, Summer 1991.
- "Economic Rationales for the Scope of Privatization," with Robert D. Willig, in *The Political Economy of Public Sector Reform and Privatization*, Ezra N. Suleiman and John Waterbury, eds., Westview Press, San Francisco, CA, 1990.
- "On the Antitrust Treatment of Production Joint Ventures," with Robert D. Willig, Journal of Economic Perspectives, Summer 1990.
- "Asset Ownership and Market Structure in Oligopoly," with Joseph Farrell, Rand Journal of Economics, Summer 1990.
- "Optimal Patent Length and Breadth," with Richard Gilbert, Rand Journal of Economics, Spring 1990.
- "Horizontal Mergers: An Equilibrium Analysis," with Joseph Farrell, American Economic Review, March 1990.
- "Theories of Oligopoly Behavior," in *The Handbook of Industrial Organization*, R. Schmalensee and R.D. Willig (eds.), 1989.
- "Market Power and Mergers in Durable Goods Industries: Comment," Journal of Law and Economics, 1989
- "The Theory of Business Strategy," Rand Journal of Economics, Spring 1989.
- "Optimal Contracts with Lock-In," with Joseph Farrell, American Economic Review, March 1989.
- "Dynamic Competition with Switching Costs," with Joseph Farrell, Rand Journal of Economics, Spring 1988.
- "Counterfeit-Product Trade," with Gene. M. Grossman, American Economic Review, March 1988.
- "Foreign Counterfeiting of Status Goods," with Gene. M. Grossman, Quarterly Journal of Economics, February 1988.
- "Dynamic R&D Competition", with Gene M. Grossman, Economic Journal, June 1987.
- "R&D Rivalry with Licensing or Imitation," with Michael L. Katz, American Economic Review, June 1987.
- "Optimal Dynamic R&D Programs," with Gene M. Grossman, Rand Journal of Economics, Winter 1986.
- "Product Compatibility Choice in a Market with Technological Progress," with Michael L. Katz, Oxford Economic Papers, Special Issue on the New Industrial Economics, November 1986.
- "Investment, Moral Hazard, and Occupational Licensing," Review of Economic Studies, October 1986.
- "How to License Intangible Property," with Michael L. Katz, Quarterly Journal of Economics, August 1986.
- "Research Joint Ventures: An Antitrust Analysis," with Gene M. Grossman, Journal of Law Economics and Organization, Fall 1986.

- "Consumer Shopping Behavior in the Retail Coffee Market," with Michael L. Katz, in Empirical Approaches to Consumer Protection, Pauline M. Ippolito and David T. Scheffman, eds., Federal Trade Commission, 1986.
- "Technology Adoption in the Presence of Network Externalities," with Michael L. Katz, Journal of Political Economy, August 1986.
- "Entry Dynamics with Mixed Strategies," with Avinash K. Dixit, in *The Economics of Strategic Planning*, L.G. Thomas, ed., Lexington Press, 1986.
- "Exchange of Cost Information in Oligopoly," Review of Economic Studies, July 1986.
- "InterLATA Capacity Growth and Market Competition," with Robert D. Willig, in *Telecommunications and Equity: Policy Research Issues*, Proceedings of the Thirteenth Annual Telecommunications Policy Research Conference, James Miller, ed., North Holland, 1986.
- "Can Unemployment be Involuntary? Reply," with Joseph E. Stiglitz, American Economic Review, December 1985.
- "On the Licensing of Innovations," with Michael L. Katz, Rand Journal of Economics, Winter 1985.
- "Normative Issues Raised by International Trade in Technology Services", with Gene M. Grossman, in Trade and Investment in Service: Canada/U.S. Perspectives, R.M. Stern (ed.), Ontario Economic Council, 1985.
- "Equilibrium Unemployment as a Worker Discipline Device: Reply," with Joseph E. Stiglitz, American Economic Review, September 1985.
- "Advances in Supervision Technology and Economic Welfare: A General Equilibrium Analysis," with Janusz Ordover, Journal of Public Economics, December 1984.
- "The General Motors-Toyota Joint Venture: An Economic Assessment," with Janusz A. Ordover, Wayne Law Journal, Summer 1985.
- "Network Externalities, Competition, and Compatibility," with Michael L. Katz, American Economic Review, June 1985.
- "Patent Licensing and R&D Rivalry," American Economic Review Papers and Proceedings, May 1985.
- "Equilibrium Unemployment as a Worker Discipline Device," with Joseph E. Stiglitz, American Economic Review, June 1984.
- "Informative Advertising with Differentiated Products," with Gene M. Grossman, Review of Economic Studies, January 1984.
- "Premiums for High Quality Products as Returns to Reputation," Quarterly Journal of Economics, November 1983.
- "Consumer Protection in the United States," Zeitscrift für die gesamte Staatswissenschaft, Journal of Institutional and Theoretical Economics, October 1983.

- "A Theory of Factor Mobility," with Gene M. Grossman, Journal of Political Economy, October 1982.
- "Optimal Pricing of Experience Goods," Bell Journal of Economics, Autumn 1983.
- "Consumer Information, Product Quality, and Seller Reputation," Bell Journal of Economics, Spring 1982.
- "Advertising and Welfare: Comment," Bell Journal of Economics, Autumn 1980.

# Working Papers, Research Memoranda, Work in Progress, etc.

"Antitrust Aspects of the Licensing of Intellectual Property," with Richard J. Gilbert, in preparation for the Brookings Papers on Economic Activity (Microeconomics).

Economic Models of Counterfeiting, with Gene M. Grossman, Report to the U.S. Department of Labor, International Labor Affairs Bureau, January 1988.

- "Strategic Behavior and R&D Competition," Prepared for the National Bureau of Economic Research, March 1984.
- "Advertising as a Barrier to Entry?," Federal Trade Commission, Bureau of Economics Working Paper #74, July 1982.
- "Product Differentiation and Imperfect Competition: Policy Perspectives," Federal Trade Commission, Bureau of Economics Working Paper #70, July 1982.

# **Book Reviews**

Controlling Industrial Pollution: The Economics and Politics of Clean Air, by Robert W. Crandall. Review in the Journal of Economic Literature, June 1984, pp. 625-627.

Sunk Costs and Market Structure: Price Competition, Advertising, and the Evolution of Concentration, by John Sutton. Review in the Journal of Economic Literature, 1993.

## Consulting Activities

Extensive experience working with private parties and government agencies on matters involving antitrust, regulation, intellectual property, measurement of damages, and general business litigation. Additional information and references available upon request.

# **Personal Information**

Place and Date of Birth: Austin, Texas, March 20, 1955.

Citizenship: United States of America.

Marital Status: Married with two children.

Hobbies: Ultimate frisbee, squash, wilderness hiking and canoeing, cycling, basketball,

chess, flute.

# AN ANALYSIS OF BELLSOUTH'S INFLATED PROJECTIONS OF COMPETITIVE BENEFITS AND CONSUMER WELFARE FOR LOUISIANA

Marybeth M. Banks
Director, Federal Regulatory Affairs
Sprint Communications Company L.P.

# I. INTRODUCTION.

The Commission has expressed its expectation that "BOCs entering the long distance market will compete vigorously for all segments of the market, including low volume long distance customers." In order to demonstrate that its entry will meet this expectation, BellSouth submitted affidavits by Jerry Hausman, Richard Schmalensee and WEFA, among others. The information presented by BellSouth fails to demonstrate that it will, in fact, compete vigorously for the low volume residential market segment; and its estimated consumer benefits, which are based on flawed assumptions, are wildly optimistic.

BellSouth's affiants have an overly narrow view of the long distance industry. Their analyses focus almost exclusively on AT&T, as if the hundreds of other competitors

Memorandum Opinion and Order, Application of Ameritech Michigan Pursuant to Section 271 of the Communications Act of 1934, as Amended, to Provide In-Region, InterLATA Service in Michigan, CC Docket No. 97-137, FCC No. 97-298 (released August 19, 1997) ("Michigan Order"), at para. 16.

have gained about 35%-40% share of long distance business in Connecticut . . ." Hausman at 10. Hausman estimates that SNET's interstate prices were 24.0% below AT&T's for customers who do not qualify for an AT&T discount plan, and 10.6% for those who do. Hausman at 11. If the analysis had been based on Sprint's most popular residential product, Sprint Sense, no average price decrease would have been estimated.

SNET's average interstate MTS rates (SNET America, Inc., Tariff F.C.C. No. 3, Original page 37) are substantially higher than Sprint Sense interstate rates of \$0.25 peak and \$0.10 off-peak. Assuming that 75 percent of the long distance residential calls are placed during the off-peak hours and calculating the difference for both the Northeast and National rate bands, the average Sprint Sense discount off SNET's MTS rates ranges from 14 to 20 percent.<sup>2</sup>

 $<sup>^2</sup>$  (-23.1% x .75) + (13.6% x .25) = -14% and (-28.6% x .75) + (4.2% x .25) = -20%. Because SNET offers a discount (of 5 percent) only to high volume customers with usage in excess of \$50, this discount was not included in the analysis.

Table 1.

	Peak	Off-Peak
SNET - Northeast	\$0.22	\$0.13
Sprint Sense	\$0.25	\$0.10
Difference		
(Sprint-SNET)	\$0.03	-\$0.03
% Difference	13.6%	-23.1%
Avg. % Sprint		
Discount		-14%
SNET - National	\$0.24	\$0.14
Sprint Sense	\$0.25	\$0.10
Difference		
(Sprint-SNET)	\$0.01	-\$0.04
% Difference	4.28	-28.6%
Avg. % Sprint Disc	ount	-20%

SNET also offers its Residence Simple Solutions calling plan. *Id.* at Original Page 51. In per minute terms, the peak rate is \$0.23 and the off-peak is \$0.17.3 Without any analysis it is quite obvious that Sprint Sense's pricing, with off-peak rates \$0.07 below SNET's, is far more advantageous to the residential customer than SNET's Simple Solutions.4 Although the SNET Simple Solutions offers

The direct dial rates are in initial 18 second and additional 1 second increments.

Sprint Sense's peak rate of \$0.25 is 9% above the SNET peak rate of \$0.23; on the other hand, Sprint Sense's off-peak rate of \$0.10 is 41% below SNET's off-peak rate of \$0.17. Assuming that 75% of residential usage is off-peak, Sprint Sense rates are, on average, approximately 29% lower than SNET's. [(-.41 x .75) + (.09 x .25) = -28.5%]

SNET's per second billing (after an initial 18 seconds) does not significantly alter the discount analysis. For an off-peak 4.5 minute call, the Sprint Sense customer would pay \$0.50, while the SNET Simple Solutions customer would pay \$0.76. The Sprint Sense customer would pay 34% less than the Simple Solutions customer.

volume discounts, they do not apply until the customer has spent \$25.00 and are therefore not available to the smaller residential customers. Any contention that the lowest volume consumers do not benefit from flat rate plans (such as Sprint Sense) which have low rates and no minimum commitment is baseless.

Hausman compares SNET's one rate plan with AT&T's \$0.15 One Rate and claims that "SNET offers a discount of 10%-15% off the \$0.15 per minute price depending on monthly calling volume." Hausman at 12. Contrary to Hausman's statement, however, SNET's rate plan, called SNET United Rate Plan, is identical to AT&T's. SNET offers a \$0.15 rate with no discounts. Id. at First Revised Page 88. Thus, Hausman's claim is incorrect, and his "estimate that SNET's one-rate prices are approximately 17.5% lower than AT&T's one-rate prices" is similarly incorrect.

These conclusions are confirmed by the submission of the United States Department of Justice. In the Supplemental Affidavit of Professor Marius Schwartz, the failure of Hausman's methodology to reflect discounts that high volume residential users already receive is fully

The fact that there are no discounts on SNET's United Rate Plan was verified by a call to its customer service, 1-800-808-7638. Marius Schwartz also noted that Hausman has erred in applying discounts to certain SNET rates that were not available. See Supplemental Affidavit of

analyzed. Professor Schwartz examines Hausman's estimate of price reductions and concludes (at p. 32) that "[h]ighvolume residential customers subscribing to . . . [discount] plans are likely to see considerably smaller price reductions than those assumed by Professor Hausman." Schwartz documents numerous examples of IXC residential products which meet or beat SNET's rates (See footnotes 33 and 36), and observes that "the majority of interLATA expenditures are made by higher-volume customers who do participate in discount plans and for whom competition already is more intense." Id. Schwartz finds that Hausman's calculation of a 17-18% average price reduction is overstated because it does not appear to account for the number of customers in discount plans versus non-discount plans as well as the higher usage and share of total minutes represented by discount plan customers (at 33). Schwartz also points out that GTE does not seem to be relying on a price strategy to attract customers because it is not aggressively pricing its products. GTE has only two long distance rate plans which are priced comparable to other IXCs' offerings (at fn. 33). These errors lead to overstatement of the benefits of BOC entry.

Marius Schwartz on Behalf of the U.S. Department of Justice (Supplemental Affidavit) at fn. 34.

Hausman uses his estimate that the "overall SNET residential prices were about 18.4% less than AT&T's prices on average" (at 11) as the basis of his calculation of the change in consumer welfare. His inflated estimate of \$6.2 billion per year, the first term of his consumer welfare function (at 14), is based on an estimate of the residential long distance market of \$33.7 billion and the 18.4% decrease in prices. Since, as demonstrated above, the percent decrease of 18.4% is far too high, the estimate of consumer welfare is correspondingly too high. Similarly, the second term of the function, which also relies on the percentage change in price, is too high.

Professor Schwartz also criticizes Hausman's calculation of the change in consumer welfare because it assumes that the price reduction of 18% applies to all interLATA revenue, rather than only that originating in the BOC service areas. Supplemental Affidavit at p.31. Schwartz estimates that 77% of all interLATA revenues originate in BOC service areas and that correcting for this error would "deflate Hausman's projected benefits to consumers by about one quarter -- even assuming, counter factually, that his projected percentage price reduction in region is accurate." Id.

<sup>6 \$33.7</sup> x .184 = \$6.2

In sum, Hausman's reliance on SNET's and AT&T's prices to forecast the extent to which RBOC entry into the long distance market would lead to rate decreases leads to exaggerated estimates of the benefits. Because his oversimplified view of the long distance market ignores the lower priced products offered by other long distance carriers, he has artificially inflated the amount of the rate decreases and the resulting benefits to consumers.

# III. WEFA'S ESTIMATES OF THE PURPORTED BENEFITS OF BELLSOUTH'S ENTRY ARE OVERSTATED.

BellSouth employed WEFA to examine the economic impact of its entry into the interLATA market in Louisiana. Based on this study, BellSouth claims that its "entry into the interLATA long distance markets throughout Louisiana will by the year 2006 generate an additional 7,600 new jobs in the state and increase the gross state product by approximately \$922 million." BellSouth at 100. The WEFA study and its heroic conclusions are facially implausible. Without extensive analysis, Sprint sets forth below some of the more serious flaws in the WEFA analysis.

First, as one of its long distance simulation assumptions, WEFA assumes that long distance prices will fall by 25 percent between 1996 and 2001 due to two factors:

(1) higher levels of competition and (2) improved utilization of an efficient network. WEFA at 8. An overall

price decrease of 25 percent is extremely optimistic. This decrease is greater than the decrease in rates during the late 1980's which resulted from significant decreases in access charges, as well as competition and more efficient network utilization. To attribute a greater decrease solely to BOC entry and more efficient utilization of the network — without any decrease in access charges — is unconvincing.

WEFA does not specify which long distance rates it expects to fall by 5 percent each year (Id.) and gives no support for its assumption. As noted, the Hausman affidavit focuses on residential services only. In contrast, the WEFA model appears to apply the discount assumption to all long distance services, including both business and residential services. Given the marked difference in the characteristics of these two market segments, the application of one price decrease factor for both groups would be overly simplistic.

Although WEFA does not state its assumptions concerning price decreases from 2001 to 2006, it is likely that it assumed a continued decrease in prices of 5 percent. WEFA offers no explanation for failing to provide its assumption throughout the forecast period. However, clearly a 50 percent rate reduction—if this is what was used to continue the economic benefits in the last five years of the

forecast--is unreasonable. It implies that the market will not reach an equilibrium after a few years, but rather that long distance carriers will continue to lower prices throughout the decade.

WEFA's assumption that prices will decrease is predicated on the assumption that prices for long distance service are increasing. As discussed above, the pricing analyses that show increases in long distance rates over the past few years are flawed because they do not take into account new services and promotional offerings. Because WEFA's pricing decrease assumption is based on an incorrect assumption about long distance pricing, the pricing decrease assumption necessarily must be incorrect as well.

In its "Derivation of Modeling Assumptions for the Long Distance Simulation," WEFA focuses on rate increases for older residential long distance products and completely ignores the new business and residential products introduced by existing and new carriers which offer lower rates and the promotions which provide discounts, free service or other benefits. Failure to include such offerings in the underlying modeling assumptions results in a distorted view of the current environment.

WEFA has failed to identify the source or to provide any specific information about the products underlying the average cost presented in Figure 2, "Recent Trends in Long Distance Rates and Exchange Access Charges." It is

Second, WEFA's stimulation is based on increased labor force participation and "new applications that enhance the viability of telework, telecommuting, and remote data, document, and information processing." WEFA at 8. However, long distance calling is not necessarily stimulated by telework or telecommuting. Rather than commute into work, employees perform the same functions at home. Because they are generally within the local calling area of their places of employment, stimulated usage is local, not long distance. Similarly, access to the Internet may be increasing, but the increase in calling is largely to local telephone numbers of the information providers. Thus, much of the additional calling generated by telework and telecommuting is local, not long distance.

In addition, WEFA's model may not accurately account for the specific demographics of Louisiana. A variety of factors may make telecommuting more or less attractive, such as the presence of congested urban areas making commuting more burdensome and costly, or the type of business involved, such as high technology areas versus traditional heavy industry work. Indeed, the example used by WEFA for "telework" centers is for Federal government centers near Washington, D.C. (at 15) Washington is known to have one of

obviously difficult to evaluate the analysis without such information.

the worst commuter congestion problems in the country along with substantial numbers of jobs in the technology sector.

WEFA has done nothing to establish that Louisiana has comparable conditions. There is simply no reason to believe that the application of a national telecommuting trend to Louisiana would be appropriate.

WEFA refers to work done by Gil Gordon Associates which found that "the single biggest technology cost for telecommuting in the future will not be equipment, but rather monthly phone bills." Id. at 15. Only a portion of increases in the monthly phone bill will be due to long distance rates. The addition of multiple phone lines into the "teleworking" household for computers, fax machines, etc. and the use of business line service in addition to residential line service will play a major role in the increased phone bill. Due to the lack of detail provided by WEFA, it is unclear whether it has included such impacts in its model.

WEFA projects productivity gains and product improvements to be 2% greater in its long distance simulation than its baseline simulation. *Id.* WEFA provides no basis for this assumption of a significant gain above and beyond the baseline gains that would be projected based on efficiencies built into historical trends. WEFA considers "information technology . . . to have three prongs --

computer hardware, computer software, and telecommunications services." Id. at 13. WEFA does not discuss the link which it is making between productivity in the "information sector" and "telecommunications services." Nor does it discuss the link between "telecommunications services" and "long distance services" which BellSouth will be providing. These are clearly important links which must be discussed in order to support any assumption concerning productivity gains due to lower long distance rates.

In Figure 3 WEFA presents the "Consumer Price Indexes for Selected Communications Services" and finds that prices are increasing. The percentage increase from 1991 through 1996 in Figure 3 is not as large as that shown in Figure 2; however, as noted, WEFA has omitted any information about the source or bases of Figure 2, making an evaluation of WEFA's statement impossible. Id. at 10. The Consumer Price Index for Telecommunications is an index for residential service only. As such, it has no relevance to the prices of services in the business market. Further, the index includes only a few volume discounts because it was developed in 1986 and updated in 1987 and 1988, well before the introduction of flat-rate pricing and the explosion of promotions. Thus, it does not accurately reflect the current telecommunications environment. Prices from only a few competitors are included in the index, and it does not

include the promotional offerings of carriers. Nor does it take into account new products, such as Sprint Sense or MCI's Friends and Family offerings, or MCI's recently introduced Sunday rate of 5 cents. Thus, it cannot be relied upon to demonstrate that prices to most consumers increased in 1996.

WEFA suggests that more households are taking advantage of the discounts, but that the average price is increasing because basic rates have risen. Again, because the Consumer Price Index for Telecommunications is an index for residential service only and includes only a few volume discounts, it does not accurately reflect the competitive products or the prices consumers pay for telecommunications services today.

WEFA claims that unit costs have decreased by 6 to 7 percent per year. Id. at 11. WEFA, however, offers no analytical justification for this estimate. Rather, it merely states that "[t]hese decreasing costs occur because of improvements and cost reductions in fiber optic electronics and switches." Id. WEFA's statement appears to ignore all other costs incurred by long distance carriers. For example, governmentally imposed costs, in particular payments for the Universal Service Fund ("USF"), Lifeline, and Telecommunications Relay Service, have increased nearly

threefold since 1989.8 Other cost increases, especially marketing and promotional costs, have been substantial and thus must be accounted for.

Because of WEFA's use of extremely optimistic
assumptions concerning price decreases and productivity
gains and because of its use of inaccurate and inflated
pricing data, its forecasted economic impact of BellSouth's
entry into the interLATA long distance market in Louisiana
forecasted is overstated and fundamentally unreliable.

# IV. BELLSOUTH'S OFFER OF A 5% DISCOUNT WILL NOT PROVIDE ANY SIGNIFICANT BENEFIT TO CONSUMERS.

BellSouth makes a commitment that it will "set[] its initial basic rates at least 5% lower than the corresponding rates of the largest interexchange carrier" when it receives interLATA authority. (BellSouth Br. at 94) This offer of a 5% discount off AT&T's non-discounted rates is simply not competitive with the IXC products in the market today and does not provide any evidence that BellSouth intends to aggressively price its products. Indeed, given the

For the last six months of 1989 the approximate monthly billing for USF and Lifeline was \$158.1 million; the FCC estimated the billings for the first half of 1996 to be \$448.3 million. In addition, since 1993 carriers are required to pay for Telecommunications Relay Service ("TRS") based on their gross revenues.

Schwartz suggests that "there is evidence that the BOCs would like to avoid a price war, including the fact that BellSouth has announced that its prices will be at least 5% below AT&T's, but has not promised the 15-20% price

discussion by Schmalensee that interexchange rates are above costs (at 10-12) and by Hausman that the BOCs have an incentive to lower prices (at 7-9), one would expect BellSouth to propose rates that are significantly below those currently offered by long distance carriers. This is not the case.

In its South Carolina application where it made a similar 5% commitment, BellSouth proposed a single residential MTS service and a single business product, both of which have a mileage-based rate structure. South Carolina P.S.C. Tariff No. 1, Original Pages 35 and 36. Sprint here analyzes these rates on the assumption that they are comparable to what BellSouth is promising for Louisiana. Sprint's analysis of BellSouth's proposed rates indicates that the rates are about 5% below Sprint's mileage-based MTS product. However, the majority of Sprint's residential customers subscribe to Sprint Sense, its flat-rated product which offers intrastate service at a peak rate of \$0.25 from 7am to 7pm, and at an off-peak rate of \$0.15 from 7pm to 7am. As shown in Table 2 below, the Sprint Sense rates average 14.4 percent below BellSouth's proposed MTS rates.

cuts that Professor Hausman predicts." Supplemental Affidavit at 30, fn. omitted.

Table 2.

	BellSouth	Sprint	Sprint
	MTS Composite	MTS Composite	Sense
Day	\$0.2626	\$0.2765	\$0.2500
Evening	\$0.2000	\$0.2105	\$0.1500
Night/	\$0.1795	\$0.1889	\$0.1500
Weekend Overall	\$0.2112	\$0.2223	\$0.1808
Difference %Difference		+ \$0.0111 - + 4.99%	- \$0.0314 - 14.4%

In the competitive long distance marketplace,
Sprint and other carriers are continuously introducing new
products and promotions to meet customers' needs. In
contrast, BellSouth proposed only one product for the
business and residential market. There is no reason to
assume, therefore, that customers would migrate to BellSouth
or benefit by its entry since its proposed prices exceed
those currently being offered by many carriers already in
the market. Further, the proposed rates are inconsistent
with the conclusions of BellSouth's economists, who predict
lower prices. Thus, BellSouth's proposed South Carolina
tariff, which it will likely duplicated in Louisiana to
achieve the 5% discount, belies the conclusions of its
affiants.

In his evaluation of Hausman's methodology, Schwartz states that the "low rate plans [offered by AT&T and other IXCs] should induce customers to migrate from the particular, relatively high-priced schedules that Professor Hausman selected for his LEC/AT&T rate comparison, even absent the availability of SNET or GTE interLATA service." Supplemental Affidavit at 33.

# V. LEC ENTRY MAY NOT INTENSIFY COMPETITION FOR LOW VOLUME CUSTOMERS.

Schmalensee suggests that low-volume customers may be less costly for BellSouth to serve and therefore "BellSouth's entry holds out the prospect of more intensified competition for this segment and more benefits to those consumers than for the other segments where competition is relatively stronger." Schmalensee at 16. It is not necessarily the case, however, that local exchange carriers will compete for such low volume customers. SNET, for example, states in its Tariff FCC No. 3, Original Page 17, that, "by written notice to the Customer, it may discontinue service in the same manner as provided for nonpayment of overdue charges if after three full billing cycles the service has not been used." Although it is not clear whether or not SNET routinely cancels such low volume accounts since it states that it "may discontinue service" (emphasis added), the statement reflects a disinclination to serve the residential customer who does not place many long distance calls. Similarly, BellSouth's proposal of a single residential MTS product does not indicate an aggressive pursuit of low-volume customers. Thus, the local exchange carriers' proposed and existing offerings for residential customers do not provide evidence of aggressive competition for the low-volume customers.

# VI. CONCLUSION.

BellSouth has failed to support its allegations of benefits to consumers from its entry into the long distance market or to demonstrate that it will stimulate competition by pricing its products below the already competitive rates. Its unrepresentative selection of long distance products and unsupported assumptions distort the estimations of consumer benefits produced by its affiants. Even BellSouth's proposed tariff for South Carolina does not demonstrate any competitive initiative or the lower rates as its affiants predict.